

been overcome, and respectfully request reconsideration of the outstanding Office Action and allowance of the present application.

Supplemental Information Disclosure Statement

Applicants concurrently submit herewith a Supplemental Information Disclosure Statement to bring the Examiner's attention to two additional articles related to the subject matter of the instant invention. While both documents are in German, Applicants note that the English language abstracts and the figures provide sufficient disclosure information.

Moreover, Applicants submit that neither document provide any teaching or suggestion of the combination of features recited in the pending claims.

Accordingly, Applicants request that the Examiner confirm consideration of these article by returning a signed and initialed copy of the Form PTO-1449 with the next official action on the merits.

Traversal of Rejection Under 35 U.S.C. § 102(b)

Applicants traverse the rejection of claims 46 - 97 under 35 U.S.C. § 102(b) as being anticipated by GROSSMANN et al. (U.S. Patent No. 5,635,033) [hereinafter "GROSSMANN"] or LAITINEN et al. (U.S. Patent No. 4,961,824) [hereinafter "LAITINEN"] or TURNER et al. (U.S. Patent No. 4,830,709) [hereinafter "TURNER"] or STECKENREUTER et al. (U.S. Patent No. 5,788,816) [hereinafter "STECKENREUTER"] or BLACKLEDGE et al. (U.S. Patent No. 5,468,348) [hereinafter "BLACKLEDGE"]. The Examiner asserts that each of the applied documents disclose an apparatus and process in

which different plies are joined by the side having more fines. Applicants traverse the Examiner's assertions.

Applicants' independent claim 46 recites, *inter alia*, at least two formers for forming at least two layers in which each layer has a higher content of fines on one side respectively, and a couching zone in which the at least two layers are couched together such that each layer's side having a higher content of fines contact each other. Applicants' independent claim 75 recites, *inter alia*, forming at least two layers via at least two formers, such that each layer has a side with a higher fines content, and couching together the at least two layers in a couching zone so that the sides with higher fines content contact each other. Applicants submit that none of the applied documents disclose at least the above-noted features of the instant invention.

Applicants note that, while the Examiner has applied a number of documents, only TURNER is discussed with any specificity. In this regard, the Examiner points out column 2, lines 12 - 18, which states that the TURNER processes prepares the ply faces for ply bonding engagement by having more fines and less fillers at their surface. However, Applicants direct the Examiner's attention to column 1, lines 52 - 57, which discloses that the top ply is produced to have "a more uniform distribution of fines, fillers, and fibers on *both its sides*, thus, providing its surfaces with a greater affinity for ply bonding." [emphasis added]. Thus, Applicants note that TURNER seeks to obtain a uniform distribution of fines

on both sides, and there is no disclosure (or even a suggestion) of producing a web ply having a higher fines content on one side.

Because TURNER fails to provide any teaching of preparing web plies to be bonded together to have a higher fines content on one side, Applicants submit that there is certainly no disclosure of couching the sides having the higher fines content together.

Thus, Applicants submit that, in contrast to the features of the instant invention, TURNER fails to disclose an apparatus having at least two formers for forming at least two layers in which *each layer has a higher content of fines on one side respectively*, and a couching zone in which the at least two layers are couched together such that *each layer's side having a higher content of fines contact each other*, as recited in at least independent claim 46. Moreover, Applicants submit that TURNER also fails to disclose a process including forming at least two layers via at least two formers, such that *each layer has a side with a higher fines content*, and couching together the at least two layers in a couching zone so that *the sides with higher fines content contact each other*, as recited in at least independent claim 75.

Moreover, Applicants note that GROSSMANN, LAITINEN, BLACKLEDGE, and STECKENREUTER each fail to disclose the above-noted subject matter of the instant invention. In particular, Applicants note that the none of the applied documents provide any teaching of that each layer is formed to have a higher fines content on one side than on the

other, and certainly none of these documents disclose that the layers are couched together so that the sides having the higher fines content contact each other, as recited in at least independent claims 46 and 75.

Applicants further note that the apparatus disclosed by each applied document cannot produce web plys in which each web ply has higher fines content on one side of the web. Applicants submit that, as the web plys cannot be produced in the manner recited in the pending claims, the apparatus cannot join together sides of the web plys having the higher fines content.

Because the applied documents fail to disclose at least the above-noted features of the instant invention, Applicants submit that the applied art fails to disclose each and every recited feature of the instant invention. Accordingly, Applicants submit that the Examiner has failed to establish an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(b), and that the instant rejections are improper and should be withdrawn.

Further, Applicants submit that claims 47 - 74 and 76 - 97 are allowable at least for the reason that these claims depend from an allowable base claim and because these claims further define the features of the instant invention. In particular, Applicants submit that none of the applied documents anticipate, *inter alia*, the fibrous web comprises one of a paper web and cardboard web, as recited in claim 47; said at least one gap former comprises two

P19790.A03

circulating continuous dewatering belts convergingly arranged to form a headbox nip, and in which said dewatering belts are guided in an area of said headbox nip over a forming element, as recited in claim 48; a headbox arranged to supply a fibrous suspension to said headbox nip, as recited in claim 49; said forming element comprises a forming roll, as recited in claim 50; said at least one gap former comprises a first gap former and a second gap former arranged to form at least two layers, wherein the higher content of fines side of said at least two layers occurs on a forming element side, as recited in claim 51; the web travel directions of said first and second gap formers are opposite each other, as recited in claim 52; a first layer created in said first gap former is guided together with at least one of said two dewatering belts around a deflection element, and then introduced via a continuous belt, traveling in a generally opposite direction to a stream direction of said headbox, into said couching zone in which the first layer and a second layer formed by said second gap former are couched together so that their sides having a higher content of fines come into contact with each other, as recited in claim 53; said deflection element comprises a deflection roll, as recited in claim 54; the first layer is guided around said deflection element together with an outer dewatering belt of said two dewatering belts, which does not come into contact with said forming element, and which is introduced into said couching zone via said outer dewatering belt, as recited in claim 55; said two dewatering belts are guided around said deflection element, and an inner dewatering belt of said two dewatering belts is separated

P19790.A03

from said outer dewatering belt which entrains the first layer following said deflection element, as recited in claim 56; said outer dewatering belt of said first gap former is guided in a generally horizontal direction, at least up to said couching zone, as recited in claim 57; a fourdrinier former, wherein a third layer is created by said fourdrinier former and sheet formation of the third layer occurs with the higher content of fines on an outer side of the third layer facing away from said continuous belt, wherein the first layer is guided over said deflection element and is couched together with the third layer; and wherein the first layer and third layer are introduced via said continuous belt into said couching zone in which the first layer and second layers, are couched together so that their sides having higher content of fines come into contact with each other, as recited in claim 58; said outer dewatering belt of said first gap former is separated in web travel direction in front of said deflection element from an inner dewatering belt and the first layer is guided around said deflection element only together with said inner dewatering belt, as recited in claim 59; the third layer and the first layer are couched together in the area of at least one of said deflection element and in a couching roll, as recited in claim 60; after separation of said two dewatering belts of said second gap former, the second layer is introduced together with said outer dewatering belt into said couching zone in which the first and second layers are couched together so that their sides having a higher content of fines come into contact with each other, as recited in claim 61; a first layer of the at least two layers to be couched together, is created by a fourdrinier

former and sheet formation of the first layer occurs with the higher content of fines on an outer side facing away from a continuous wire, and wherein a second layer is created by said at least one gap former and sheet formation occurs in the second layer with a higher content of fines on the forming element side, as recited in claim 62; a stream direction of a headbox associated with said first gap former correlates in general with the travel direction of the first layer created by said fourdrinier former, as recited in claim 63; the second layer created by said at least one gap former is introduced, after a separation of said two dewatering belts of said at least one gap former, together with said outer dewatering belt into said couching zone in which the second layer is joined with said continuous belt for the first and second layers to be couched together, as recited in claim 64; said continuous wire is guided in said couching zone in a generally horizontal direction, as recited in claim 65; a second gap former arranged to form a third layer, wherein sheet formation of the third layer occurs with a higher content of fines on a forming element side, and wherein the third layer is couched together with the second layer in a second couching zone, as recited in claim 66; the stream direction of a headbox associated with said second gap former corresponds to the travel direction of the first layer created by said fourdrinier former, as recited in claim 67; the third layer is introduced after separation of said two dewatering belts of said second gap former together with said outer dewatering belt into said second couching zone, wherein the second layer is brought together with said continuous belt for couching together the second and third layers

formed by said first and second gap formers, as recited in claim 68; said continuous wire is guided at least in the area of said couching zones in a generally horizontal direction, as recited in claim 69; at least one additional gap former arranged for the formation of an at least three-layered fibrous web, wherein sheet formation of the additional layer occurs with a higher content of fines on the forming element side, wherein the additional layer is couched in an additional couching zone with one of the at least two layers formed by the first or second gap former, and where at least one of the at least two layers is couched together with the additional layer so that their sides having higher content of fines come into contact with each other, as recited in claim 70; the stream direction of said headbox associated with said at least one additional gap former corresponds to the travel direction of the fibrous web to be created, as recited in claim 71; at least one of a multi-layered headbox and a single layered headbox is provided, as recited in claim 72; at least one single layered headbox is provided, as recited in claim 73; uniform pressure dewatering elements for web dewatering, as recited in claim 74; the fibrous web comprises one of a paper web or a cardboard web, as recited in claim 76; the at least one gap former comprises two circulating continuous dewatering belts that run together forming a headbox nip and which are guided in the area of the headbox nip, loaded with a fibrous suspension by a headbox, over a forming element, as recited in claim 77; the forming element comprises a forming roll, as recited in claim 78; the at least one gap former comprises a first gap former and a second gap former arranged to form at least two

layers, wherein the higher content of fines side of said at least two layers occurs on a forming element side, as recited in claim 79; the first and second gap formers are operated in opposite web travel directions, as recited in claim 80; a first layer formed in the first gap former is guided together with at least one of the two dewatering belts around a deflection element, and then via a continuous belt is introduced in a direction generally opposite to the travel direction of a first headbox into the couching zone in which the first layer and a second layer formed by the second gap former are couched together so that their sides having a higher content of fines come into contact with each other, as recited in claim 81; the deflection element comprises a deflection roll, as recited in claim 82; the first layer created in the first gap former is guided together with an outer dewatering belt, which does not come into contact with the forming element, around the deflection element and introduced into the couching zone via the outer dewatering belt, as recited in claim 83; the two dewatering belts are guided around the deflection element and the an dewatering belt is separated from the outer dewatering belt entraining the layer consecutive to the deflection element, as recited in claim 84; a third layer is created by a fourdrinier former and sheet formation of the third layer occurs with the higher content of fines on an outer side facing away from the continuous belt, wherein the first layer is guided over the deflection element and is couched together with the third layer formed by the fourdrinier former, and wherein the first and third layers are introduced via the continuous belt into the couching zone in which the layers

formed by the first and third formers are couched together so that their sides having a higher content of fines come into contact with each other, as recited in claim 85; the outer dewatering belt of the first gap former is separated in web travel direction in front of the deflection element from the inner dewatering belt and the first layer is guided around the deflection element only together with the inner dewatering belt, as recited in claim 86; the third layer and the first layer formed in the first gap former are couched together in the area of at least one of the deflection element and a couching roll, as recited in claim 87; the second layer is guided after the separation of the two dewatering belts of the second gap former together with the outer dewatering belt to the couching zone, in which the first and second layers are couched together so that their sides of higher content of fines come into contact with each other, as recited in claim 88; the first of the at least two layers to be couched together is created by a fourdrinier former and sheet formation of the first layer occurs with a higher content of fines on the outside facing away from the continuous wire, and the second layer is created by the at least one gap former and sheet formation occurs in the second layer with a higher content of fines on a forming element side, as recited in claim 89; the stream direction of a headbox associated with the first gap former correlates in general with the travel direction of the first layer created by the fourdrinier former, as recited in claim 90; the second layer created by the at least one gap former is guided to the couching zone after separation of the two dewatering belts of the at least one gap former together with

the outer dewatering belt, in which the second layer is joined together with the continuous belt for the first and second layers to be couched together, as recited in claim 91; a second gap former is arranged to form a third layer wherein sheet formation of the third layer occurs with a higher content of fines on the forming element side, and wherein the third layer is couched together with the second layer in a second couching zone, as recited in claim 92; the stream direction of a headbox associated with the second gap former corresponds to the travel direction of the first layer formed by the fourdrinier former, as recited in claim 93; the third layer is introduced after separation of the two dewatering belts of the second gap former together with the outer dewatering belt into the second couching zone in which it is brought together with the continuous belt for the couching of the second and third layer formed by the first and second gap formers, as recited in claim 94; at least one additional gap former is arranged for the formation of an at least three-layered fibrous web, wherein sheet formation of the additional layer occurs with a higher content of fines on the forming element side, wherein the additional layer is couched in an additional couching zone with one of the at least two layers formed by the first or second gap former, and where at least one of the at least two layers is couched together with the additional layer so that their sides having higher content of fines come into contact with each other, as recited in claim 95; the stream direction of a headbox associated with the additional gap former corresponds to the travel direction of the fibrous web to be created, as recited in claim 96; and at least one of a multi-layered

headbox and single-layered headbox is used, as recited in claim 97.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 46 - 97 under 35 U.S.C. § 102(b), and indicate that these claims are allowable.

Application is Allowable

Thus, Applicants respectfully submit that each and every pending claim of the present invention meets the requirements for patentability under 35 U.S.C. §§ 102 and 103, and respectfully request the Examiner to indicate allowance of each and every pending claim of the present invention.

Authorization to Charge Deposit Account

The Commissioner is authorized to charge to Deposit Account No. 19 - 0089 as any necessary fees, including any extensions of time fees required to place the application in condition for allowance by Examiner's Amendment, in order to maintain pendency of this application.

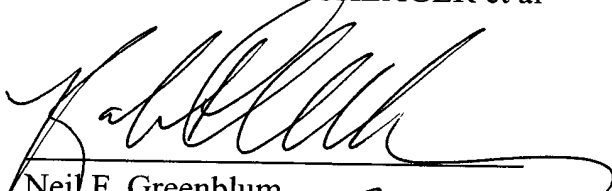
CONCLUSION

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the Applicants' invention, as recited in each of claims 46 - 97. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

P19790.A03

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Respectfully submitted,
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